

ABSTRACT OF THE DISCLOSURE

A motion transmission and multiplication system applicable to a wide range of products and providing a system of elements for multiplying the effective physical work achieved by simple hand and leg movements. In a preferred embodiment, a pair of elements are arranged in proximity to one another with a flexible loop connecting them in such a way as to develop motion transmission between them when the flexible loop is moved. This design can be extended to include additional elements which are linked together, and these elements may be nested and arranged for telescopic motion or they may be arranged for side-by-side motion. In a simple construction, a loop is arranged on a first pipe segment, and a second telescopically nested pipe segment emerges from the first one and retracts therewithin when the loop is provided with a driving motion which causes driven motion of the second segment therein. Multiplication of the effects of hand movement, and control over the telescopic motion of structures and their length, can be implemented in many fields including cleaning systems, vacuum cleaners, measuring rods, tools, paint rollers, wall scrapers, music stands and instruments, parasols, shades, curtains, sailing boats, and structures such as chairs, tripods, tables, tents, etc. Other advantages of the invention are in the field of cargo transportation and delivery from one place to the other. The invention can be applied to many devices and products, which can be improved substantially so as to increase the simplicity and speed of operating them.